Access Check

- Participants are muted.
- We will have a Q&A section at the end
- Enter questions in the Q&A chat at any time.
- We will be sharing these slides after the presentation.
- This presentation is being recorded and will be posted to the event page in the next month or so

Practical Tips for Accessible Content and Multilingual Websites

Willa Armstrong, Digital Accessibility Specialist, warmstrong@loc.gov

Wendy Stengel, Section Head – Accessibility and Usability, wsten@loc.gov

December 3, 2020

Digital Accessibility

Accessibility

- Building in way that doesn't create barriers
- Classic example is of the curb cut

Digital Accessibility

- Hardware, websites, documents, apps, and more
- Usable, equitable, and enjoyable by all, including people with disabilities.
- Shared responsibility

Disabilities

- Disabilities can be permanent or temporary
- Web Accessibility Perspectives: Explore the Impact and Benefits for Everyone

Common Navigation and Assistive Technology

- Keyboard Navigation
- Screen magnifiers
 - Enlarges a screen or section of a screen
- Screen readers
 - Powerful technology used everyday
 - Reads aloud the **text** and **structure** of a page
 - Can be used with a refreshable braille display

How to Create Accessible Materials?

- Work inclusively and involve users directly
- Consider accessibility requirements from the start
- Ask about policies and standards

Standards & Policies

- Laws (Federal, state, local) and organizational policy
- Web Content Accessibility Guidelines (WCAG)
 - Abbreviation pronounced "wuh-cag"
- Section 508

Set 1: Questions to Ask

- What policies has your agency adopted?
- Do we know how to make this product accessible?
- Who is checking for accessibility?

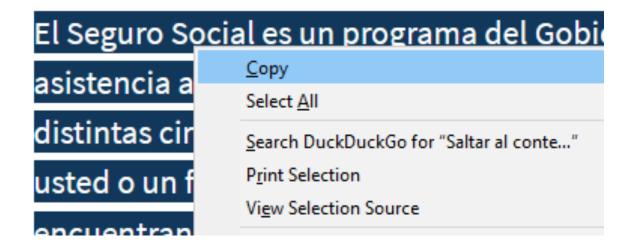
Accessible Content

Recognizable Text

- Use machine readable text
 - Quick test: Can text be copied and pasted?

- Watch out for:
 - Scanned PDFs
 - Images of text used in social media, promos, and emails or invites

¿Qué es el Seguro Social y





Plain Language is Accessible Language

- Plain language:
 - Increases your content's cognitive accessibility
 - Improves translations
 - Communicates complex information effectively
 - <u>Is required by law</u>*

Readability

- Word shapes matter
- WORD SHAPES MATTER
- Word Shapes Matter
- Word shapes matter



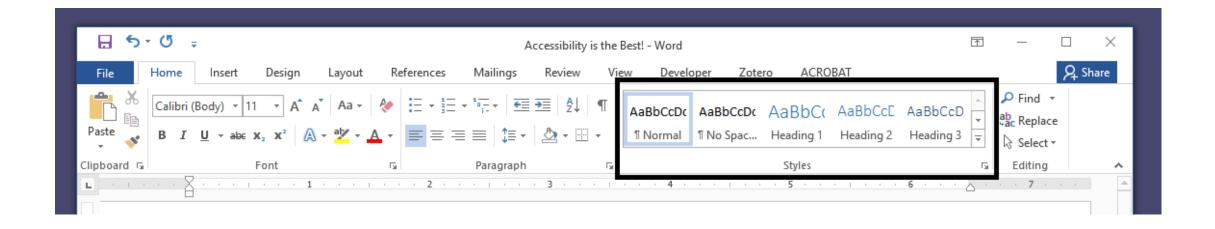
Headings & Lists

- Organize content with headings and lists
- Communicate hierarchy



Create Semantic Headings & Lists

- Make sure headings and lists are semantic (part of the mark-up)
- Use built in styles to create headings
- Tools: Everything listed in Tools & Tutorials page



Color Contrast

- Text must have high enough contrast to be easily legible by most
 - Minimum ratio of 4.5:1
- A number of tools available for checking
- Set contrast colors at a template level
- Tool: WebAIM Contrast Checker

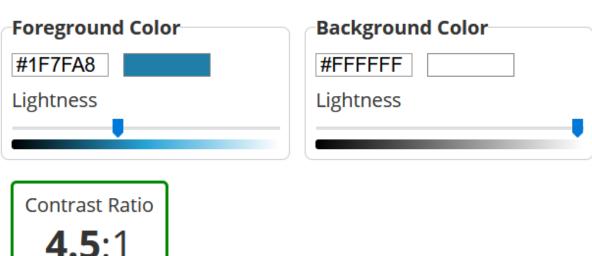


Image Description (Alt Text)

• Phrases or short, 1-2 sentences communicating the image information

• Ask why, when where, wh



Audio & Video

- Provide text alternatives to multimedia like videos and images.
- Text alternatives mean:
 - Captions and descriptions for video
 - Transcripts for audio
 - Captions for live audio or video
- Captions and transcripts communicate:
 - Dialogue
 - Narration
 - Significant sounds, music, noises
 - Speaker identification

Captions versus Subtitles

- Captions Text in the spoken language(s) of the video
- Subtitles Text translated to a language different from video's spoken language
- (In some places these two meanings are reversed.)
- All videos should have captions, even if they also have subtitles

Set 2: Questions to Ask

- Do my materials have machine readable text?
- Am I using plain language?
- Did I use headings and lists to organize information? Are they semantic?
- Does my text have sufficient color contrast?
- Do all my images have meaningful alt text?
- Do my videos have captions in the video's spoken language(s)?
- Do my audio files have transcripts in the audio's spoken language(s)?

Language!

(Key slides coming up!)

Language metadata

Websites and documents allow you to add mark-up and metadata identifying the:

- Language of the page
- Language of sections of the page

You need to identify the language of every single document and webpage

If sections of a page are in a different language, section in different languages must be identified in the mark-up.

When You Identify Language

- Screen readers will correctly read the text
- Spellcheck works as expected
- Automatic translation apps and features know which language to translate
- Search engine results improve
- Browsers know how to handle punctuation like quote marks and decimals vs. commas
- Browsers know how to handle hyphenation for smaller screens or when magnified

When You Don't Identify Language

- Screen readers will not announce text or will announce nonsense
- Automated translations and search results are incorrect
- Spellcheck, punctuation, and hyphenation are incorrect

• ...and these errors won't necessarily be obvious to users

How do you identify language?

- In documents like PDFs, use the document metadata
- In HTML, use the `lang` attribute, a small, but vital piece of code.
 - Must be added to define the language of every page
 - If page content contains multiple languages, those sections should each have its own 'lang' attribute



Sitio web:

Biblioteca del Congreso, División Hispánica

Busque en USAGov en Español

Q

Todos los temas y servicios Ayuda financiera ∨ y beneficios

Ciudadanía, inmigración y viajes

(Library of Co

Dinero e Vimpuestos

Directorios ∨ del Gobierno

Trabajo y ∨ desempleo

Votaciones y ∨ elecciones

English

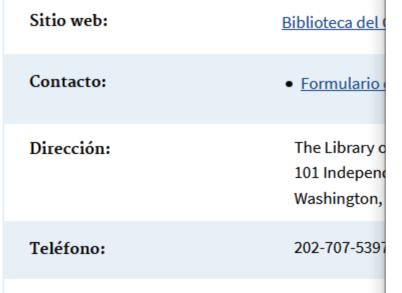
Biblioteca del Congreso, División Hispánica

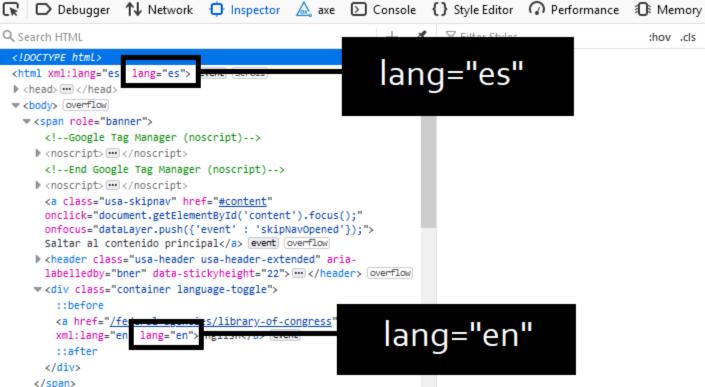
La Biblioteca del Congreso es la entidad cultural más antigua en Estados Unidos. Sirve como la institución de investigación

para el Congreso. Conserva una colección universal de Developer Tools — Biblioteca del Congreso, División Hispánica | USAGov — https://www.usa.gov/espanol/agencias-federales/bibl fotografías, películas, grabaciones de audio, grabados

Detalles de la agencia

Agancia on ingláce





Tools & Tutorials for Language Identification

Tools to check if there is a lang present for the HTML page:

- aXe Browser extension tool for Firefox, Chrome, and Edge
- WAVE: offers both website based and browser extension tool

Tutorials on Document Accessibility:

- MS Office How-To: Making Word Documents Accessible
- Create and verify PDF accessibility (Acrobat Pro)

American Sign Language

- American Sign Language (ASL) is a language.
 - Its own grammar, vocabulary, and accents
- ASL is may be your customers first and preferred language

Set 3: Questions to Ask

- Did we add metadata on the default language of all our webpages and documents?
- Are there pages multiple languages? If so, have we added mark-up with the language of those sections?

Thank you!

Willa Armstrong, warmstrong@loc.gov Wendy Stengel, wsten@loc.gov

Federal Resources

- <u>18F Accessibility Guide</u> Checklist and tools for digital accessibility
- <u>Accessibility for Teams</u> Accessibility topics and tips organized by specialty: UX, Content, Development, etc.
- <u>Section 508</u> Pretty much every topic you could ask for is covered here! Intro to Section 508, Procurement, Testing, Building your accessibility program, and more.
- <u>Cooper Hewitt Guidelines for Image Description</u> Style guide and example gallery for image description.
- <u>PlainLanguage.gov</u> Guidelines and information on plain language requirements.
- <u>USA.gov Style Guide</u> Style guide with considerations for Multilingual and accessible content.

General Resources

- Web Content Accessibility Guidelines (WCAG)
- Easy Checks A First Review of Web Accessibility
- Set of videos on digital accessibility basics and why they matter, <u>Web Accessibility</u> <u>Perspectives: Explore the Impact and Benefits for Everyone</u>
- WebAIM Range of resources from
- Demo of a screen reader from University of California San Francisco (~5 min YouTube video), Screen Reader Demo for Digital Accessibility
- NPR Interviews on American Sign Language (4 min YouTube Video), <u>A Few Things</u> to Know About American Sign Language
- WebAIM article on Headings and Lists

Tools & Tutorials

- WebAIM Contrast Checker
- aXe Browser extension tool for Firefox, Chrome, and Edge
- WAVE: offers both website based and browser extension tool
- <u>18F Article on Accessibility Testing Tools</u>
- MS Office How-To: Making Word Documents Accessible
- Create and verify PDF accessibility (Acrobat Pro)
- Adding image description (alt text) on Twitter images
- Adding image description (alt text) on Instagram
- Adding image description (alt text) to Facebook images
- Adding and editing captions on Facebook Videos

Language Resources

- <u>W3C Article "Why use the language attribute?</u> Overview of the importance of identifying language of a page
- MDN Web Docs article on lang
- MS Word article: Add an editing or authoring language or set language preferences in Office
- Adobe Acrobat: Setting Document Language in a PDF
- On Use of the Lang Attribute: Article on the ins and outs of the `lang` attribute; includes an video demo of a screen reader reading text incorrectly because the `lang` attribute is incorrect.
- MDN Web Docs article on hyphens Overview on how hyphenation works in browsers (and dependence on `lang` attribute.)
- <u>The lang attribute: browsers telling lies, telling sweet little lies</u>: Walks through and example of how auto translate apps use the `lang` attribute (and what happens when the metadata is incorrect.)